



\*\*FILE\*\* ID\*\*MTHIMAX0

I 16

|     |    |                         |                                 |
|-----|----|-------------------------|---------------------------------|
| (2) | 48 | HISTORY                 | : Detailed Current Edit History |
| (3) | 57 | DECLARATIONS            |                                 |
| (4) | 83 | MTH\$IMAX0, MTH\$AIMAX0 |                                 |

0000 1 .TITLE MTH\$IMAX0 IMAX0 and AIMAX0 functions  
0000 2 .IDENT /1-002/ ; File: MTHIMAX0.MAR  
0000 3  
0000 4  
0000 5 \*\*\*\*\*  
0000 6 \*  
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0000 24 \*  
0000 25 \*  
0000 26 \*\*\*\*\*  
0000 27  
0000 28  
0000 29 FACILITY: MATH LIBRARY  
0000 30 ++  
0000 31 ABSTRACT:  
0000 32  
0000 33  
0000 34 --  
0000 35  
0000 36 VERSION: 0  
0000 37  
0000 38 HISTORY:  
0000 39  
0000 40 AUTHOR:  
0000 41 Jonathan M. Taylor, 12-JUL-77: Version 0  
0000 42  
0000 43 MODIFIED BY:  
0000 44  
0000 45  
0000 46 :

0000 48 .SBTTL HISTORY ; Detailed Current Edit History  
0000 49  
0000 50  
0000 51 : Edit History for Version 0 of MTHIMAX0  
0000 52 :  
0000 53 : 0-2 - Fix access violation and step by 2 bug. TNH 21-Aug-78  
0000 54 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78  
0000 55 : 1-002 - Add "\_" to the PSECT directive. JBS 22-DEC-78

```
0000  57      .SBttl DECLARATIONS
0000  58
0000  59 : INCLUDE FILES:
0000  60 : 61 : 62 : 63 : 64 : EXTERNAL SYMBOLS:
0000  65 : 66 : 67 : 68 : MACROS:
0000  69 : 70 : 71 : 72 : PSECT DECLARATIONS:
00000000 73 : .PSECT _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000  74
0000  75 : 76 : EQUATED SYMBOLS:
0000  77 : 78 : 79 : 80 : OWN STORAGE:
0000  81 :
```

0000 83 .SBTTL MTHSIMAX0, MTHSAIMAX0  
 0000 84  
 0000 85 :++  
 0000 86 : FUNCTIONAL DESCRIPTION:  
 0000 87  
 0000 88  
 0000 89 : CALLING SEQUENCE:  
 0000 90 : NONE  
 0000 91  
 0000 92  
 0000 93 : INPUT PARAMETERS:  
 0000 94 : NONE  
 0000 95  
 0000 96 : IMPLICIT INPUTS:  
 0000 97 : NONE  
 0000 98  
 0000 99 : OUTPUT PARAMETERS:  
 0000 100 : NONE  
 0000 101  
 0000 102 : IMPLICIT OUTPUTS:  
 0000 103 : NONE  
 0000 104  
 0000 105 : COMPLETION CODES:  
 0000 106 : NONE  
 0000 107  
 0000 108 : SIDE EFFECTS:  
 0000 109 : NONE  
 0000 110  
 0000 111 :--  
 0000 112  
 0000 113  
 0000 114  
 0000 115  
 09 0000 0000 116 .ENTRY MTHSIMAX0, ^M<>  
 10 0002 117 BSB MAXW ; R0 = max arg  
 04 0004 118 RET  
 0005 119  
 50 0000 0005 120 .ENTRY MTHSAIMAX0 ^M<>  
 04 10 0007 121 BSB MAXW ; R0 = max arg  
 50 40 0009 122 CVTWF R0, R0 ; REAL\*4 max arg  
 04 000C 123 RET  
 000D 124  
 000D 125 :+  
 000D 126 : MAXW returns the maximum of the INTEGER\*2 args.  
 000D 127 :  
 000D 128  
 000D 129 MAXW:  
 51 60 9A 0000 130 MOVZBL (AP), R1 : R1 = number of args  
 5C 04 C0 0010 131 ADDL #4, AP : AP -> first arg adr  
 50 9C B0 0013 132 1\$: MOVW 2(AP)+, R0 : get trial max  
 08 11 0016 133 BRB 3\$ : check arg count  
 50 00 BC B1 0018 134 2\$: CMPW 20(AP), R0 : if this arg is greater then trial max  
 F5 14 001C 135 BGTR 1\$ : then it becomes trial max  
 8C D5 001E 136 TSTL (AP)+ : else ignore it  
 F5 51 F5 0020 137 3\$: SOBGTR R1, 2\$ : check arg count  
 05 0023 138 RSB  
 0024 139

MTH\$IMAX0  
1-002

IMAX0 and AIMAX0 functions  
MTH\$IMAX0, MTH\$AIMAX0

C 1

16-SEP-1984 01:43:15 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:08 [MTHRTL.SRC]MTHIMAX0.MAR;1 Page 5 (4)

MT  
2-1

0024 140  
0024 141 .END

## MTHS1MAXC Symbol table

## IMAX0 and AIMAX0 functions

0 1

16-SEP-1984 01:43:15 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:08 [MTHRTL.SRC]MTHIMAX0.MAR;1

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(4)

|            |          |    |    |
|------------|----------|----|----|
| MAXW       | 0000000D | R  | 01 |
| MTHSAIMAX0 | 00000005 | RG | 01 |
| MTHSIMAX0  | 00000000 | RG | 01 |

+-----+  
! Psect synopsis !  
+-----+

PSECT name

| Allocation      | PSECT No. | Attributes |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------|-----------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----           | -----     | -----      | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| 00000000 ( 0.)  | 00 ( 0.)  | NOPI       | USR   | CON   | ABS   | LCL   | NOSHR | NOEXE | NORD  | NOWRT | NOVEC | BYTE  |       |       |
| 00000024 ( 36.) | 01 ( 1.)  | PIC        | USR   | CON   | REL   | LCL   | SHR   | EXE   | RD    | NOWRT | NOVEC | LONG  |       |       |

## ! Performance indicators !

## Phase

| Page faults | CPU Time    | Elapsed Time |
|-------------|-------------|--------------|
| 35          | 00:00:00.11 | 00:00:01.01  |
| 145         | 00:00:00.47 | 00:00:04.27  |
| 68          | 00:00:00.44 | 00:00:02.24  |
| 0           | 00:00:00.00 | 00:00:00.00  |
| 40          | 00:00:00.31 | 00:00:01.07  |
| 2           | 00:00:00.02 | 00:00:00.11  |
| 2           | 00:00:00.02 | 00:00:00.02  |
| 0           | 00:00:00.00 | 00:00:00.00  |
| 294         | 00:00:01.37 | 00:00:08.72  |

The working set limit was 900 pages.

1523 bytes (3 pages) of virtual memory were used to buffer the intermediate code. There were 10 pages of symbol table space allocated to hold 3 non-local and 3 local symbols. 141 source lines were read in Pass 1, producing 13 object records in Pass 2. 0 pages of virtual memory were used to define 0 macros.

-----+  
! Macro library statistics !  
-----+

### Macro library name

## Macros defined

\$2555\$DUA28:[SYSLIB]STARLET.MLB:2

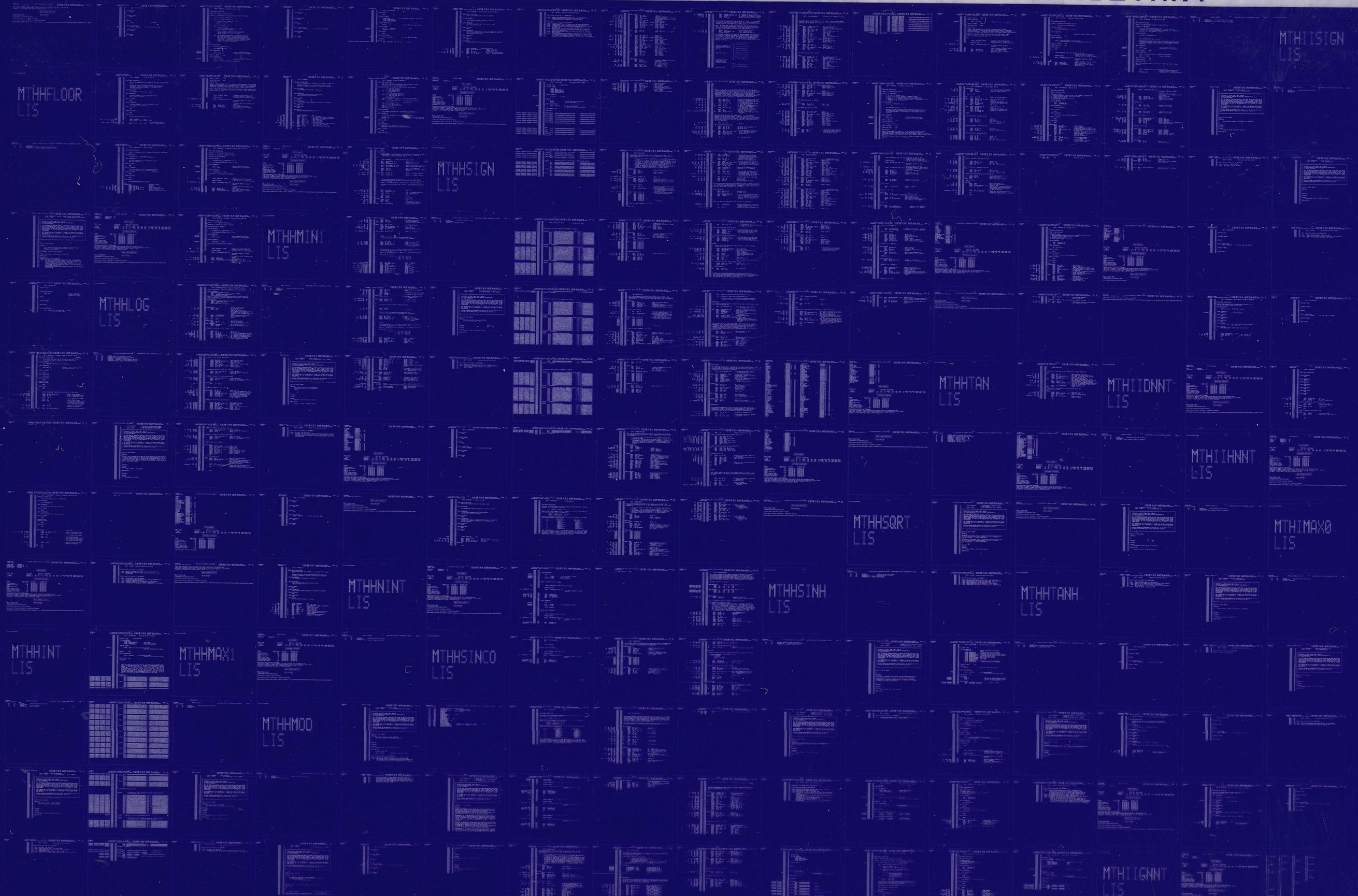
0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:MTHIMAX0/OBJ=OBJ\$:MTHIMAX0 MSRC\$:MTHIMAX0/UPDATE=(ENHS:MTHIMAX0)

0262 AH-BT13A-SE  
VAX/VMS V4.0

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